

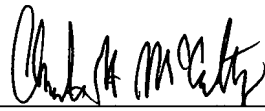
REMARKS

By this Amendment, claims 11-16 are cancelled, claims 1-10 and 17-18 are amended to clarify the recited subject matter and claims 19-31 are newly introduced. No new matter is added by this Amendment because the claim amendments and new claims are fully supported by the originally filed specification and claims. Claims 1-10 and 17-31 are pending in this application.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached Appendix is captioned “Version with markings to show changes made”.

Prompt examination and favorable consideration on the merits are respectfully requested.

Respectfully submitted,
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APPENDIX

Version with markings to show changes made

IN THE SPECIFICATION:

At the top of the first page, just under the title, insert

☒ --This application is the National Phase of International Application

PCT/FI99/00825 filed October 5, 1999 which designated the U.S.

and that International Application

☒ was ☐ was not Published under PCT Article 21(2) in English.—

IN THE CLAIMS:

1. (Amended) A method of allocating a temporary identity [(TLLI) in a cellular network] to [a] at least one mobile station [(MS) by] in a cellular network, the method comprising:

using a [first] network element [(SGSN, BSC, RNC) which has] having an identifier of its own to allocate a temporary identity to the at least one mobile station,
[c h a r a c t e r i z e d i n t h a t] wherein the temporary identity [(TLLI) comprises] includes at least part of an identifier [(NEI)] indicating the [first] network element.

2. (Amended) [A method according to] The method of claim 1,
[c h a r a c t e r i z e d i n t h a t] wherein each of the at least one mobile stations is located within one of a plurality of paging areas of the cellular network, and wherein the temporary identity [also] of the network element also includes [comprises] a paging identity which is unique to each of the at least one mobile [station] stations [in the paging areas in question].

3. (Amended) [A method according to claim 1 or] The method of claim 2,
[c h a r a c t e r i z e d in that] further comprising uniquely identifying the network element
based on the identifier [(NEI)] of the [first] network element [together with] and an identifier
[(RAI)] of the paging area where [said] the temporary identity was allocated [uniquely
identifies the first network element].

4. (Amended) [A method according to any one] The method of [the preceding claims,
c h a r a c t e r i z e d in that] claim 2, wherein
[the cellular network comprises a plurality of paging areas,] each of the plurality of paging
[area] areas [having] includes an associated master network element for allocating a paging
identity to each of [several] the at least one mobile stations in the paging area; and
wherein the method further comprises:

requesting a paging identity for at least one mobile station from the master
network element of a paging area; and [the first network element,]

[before] allocating the temporary identity to the at least one mobile station in
the [a] paging area associated with the master network element[, requests a paging identity
for the mobile station from said master network element in the paging area in question].

5. (Amended) [A method according to any one of the preceding claims] The method
of claim 4, [c h a r a c t e r i z e d in that the cellular network comprises a plurality of paging
areas,] wherein each of [which] the plurality of paging areas is [connected] coupled to a
plurality of network elements, and [that] wherein the method further comprises using

[cellular network uses said] the temporary identity for routing uplink traffic to the network element currently serving the at least one mobile station [(MS)].

6. (Amended) [A method according to any one of the preceding claims] The method of claim 5, [c h a r a c t e r i z e d in that the cellular network comprises a plurality of paging areas, and that] further comprising, after the at least one mobile station moves from a first paging area of the plurality of paging areas to a second paging area of the plurality of paging areas, [after a change to a new paging area by the mobile station (MS), a] the network element [to which the mobile station is registered] of the second paging area using [uses said] the temporary identity and the identifier of the [new] second paging area for deriving an identifier of the network element of the first paging area which served the mobile station before [said change] the move.

7. (Amended) [A method according to any one of claims 2 to 6] The method of claim 6, wherein [c h a r a c t e r i z e d in that] only [said] the paging identity is used [at first] for paging the mobile station, and [that] the method further comprises using the [entire] temporary identity [is used] for [signalling] signaling.

8. (Amended) A network element [, preferably a support node (SGSN)] for a cellular network[, adapted] configured to allocate a temporary identity [(TLLI)] to [a] at least one mobile station [(MS)], [c h a r a c t e r i z e d in that said] wherein the temporary identity [comprises] includes at least a part [, preferably 3 to 5 bits,] of an identifier [(NEI)] indicating [the] a network element that allocates the temporary identity.

9. (Amended) The network element [according to] of claim 8, [c h a r a c t e r i z e d by being adapted] wherein the network element is configured to use [said] the temporary identity [(TLLI)] and [the] an identifier of [the] a paging area [where] in which the at least one mobile station [(MS)] is located to derive an identifier of another network element which previously served the mobile station [prior to the current network element].

10. (Amended) [A] The network element [according to] of claim 8 [or 9], [c h a r a c t e r i z e d in that] wherein [said] the temporary identity also [comprises] includes a paging identity which is unique to each of the at least one mobile [station (MS)] stations in [the] a paging area [in question] of the cellular network.

17. (Amended) A radio station controller [, preferably a Base Station Controller (BSC) or a Radio Network Controller (RNC),] for a cellular network, [adapted] configured to route data packets [comprising] including a temporary identity allocated to a mobile station [(MS)], [c h a r a c t e r i z e d in that] wherein

the temporary identity [comprises] includes at least part [, preferably 3 to 5 bits,] of an identifier [(NEI)] indicating a [first] network element which allocated the temporary identity;

and wherein the radio station controller is [adapted] configured to use [said] at least part of the temporary identifier [for routing] to route data packets to [said] the first network element currently serving the mobile station.

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